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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
SHOEI KOBAYASHI , ET AL., : EXAMINER: CHU, K.
SERIAL NO: 09/689,005 :
FILED: OCTOBER 12, 2000 : GROUP ART UNIT: 2653
FOR: RECORDING/REPRODUCING :
APPARATUS AND :
RECORDING/REPRODUCING :
METHOD

APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal of the final Action mailed June 7, 2004, that presented a final rejection of Claims 1 and 6-10. A Notice of Appeal was timely filed on December 7, 2004.

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is the Assignee SONY
CORPORATION.

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II. RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative, and the assignees are aware of no appeals which will directly affect or be directed affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF THE CLAIMS

Claims 1 and 6-10 are pending in this application. Claims 1 and 6-10 have been finally rejected and form the basis for this appeal. The attached claim appendix includes a clean copy of appealed Claims 1 and 6-10.

IV. STATUS OF THE AMENDMENTS

No amendments after the final rejection mailed June 7, 2004, have been filed.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent base Claim 1 is directed to a recording/reproducing apparatus for recording and reproducing data on and from an optical disk 10, for example, that has an address data area having embossed pits and a recording/reproducing area having a wobbling spiral groove. See FIGS 2-3, for example. This apparatus is recited to include various components shown in FIG. 1, for example. These illustrated components include a head means (optical head 11, for example) for reading address data from the address data area, and writing and reading a signal in and from the recording/reproducing area. Note, for example, the description of reproducing using the optical head 11 at page 8, lines 6-15 and that of recording at page 7, line 20-page 8, line 5.

In addition to the head mans, Claim 1 requires a system controller means for controlling components of the recording/reproducing apparatus including servo circuit means. The system controller means is illustrated in FIG. 1, for example, as system controller 13 that is shown connected to servo circuit 18 that operates as the Claim 1 servo circuit means in terms of being controlled by 13 to in turn control moving the head 11 to a desired address position on the optical disk 10. See page 7, lines 18-20, for example.

The components also include the Claim 1 wobble-signal processing means that is illustrated as band pass filter (BPF) 22 in the phase locked loop (PLL) embodiment showings of FIG. 4 or FIG. 8, for example, that include exemplary PLL circuits corresponding to the Claim 1 PLL circuit means. As explained at page 9, lines 6-8, for example, BPF 22 acts to extract a wobble signal from the signal the optical head 11 obtains from the wobbling spiral groove and provides this wobble signal to one of these the PLL circuit embodiments, for example, which produce a sync signal from the wobble signal.

The system controller 13 further produces a wobble enable signal that is applied to the PLL circuit embodiments at different times when the wobble signal is disturbed or missing. For example, the system controller 13 further produces a wobble enable signal that is applied to the PLL circuit embodiments when the system controller 13 controls switching of the recording/reproducing apparatus between at least one of recording and reproducing operations as noted, for example, at page 10, lines 7-10. The provision of the wobble enable signal to the PLL circuit embodiments when the system controller 13 controls the servo circuit 18 to move the head 11 to a desired address position on the optical disc is another such time as explained at page 10 relative to the wobble signal shown in FIG. 6, for example. The provision of the

wobble enable signal to the PLL circuit when there is no wobble signal extracted from the signal the optical head 11 obtains from the wobbling spiral groove is explained as to the wobble signal shown in FIG 7 and its explanation at page 11, lines 1-7, for example. The holding of the PLL circuit output when the wobble enable signal is applied thereto is described at page 10, lines 11-13, for example.

The subject matter of independent method Claim 6 and independent apparatus Claim 9 essentially parallels that of Independent Claim 1 as fully outlined above.

The main difference between Claims 1 and 9 is that Claim 9 does not include the “means” recitations found in Claim 1. The main difference between Claim 6 and Claim 1 is that Claim 6 recites a method that includes a step of using a system controller (corresponding to system controller 13, for example) to control components of the recording/reproducing apparatus to provide operations resulting in the loss of the extracted wobble signal including the operation of switching between recording and reproducing functions which has been fully explained above as to page 10, lines 7-10, for example.

In addition, it is noted that slightly different wording appears in Claim 6 from that used in Claims 1 and 9. In this regard, the above-noted provision of the wobble enable signal to the PLL circuit by the system controller 13 when it also controls the servo circuit 18 to move the head 11 to a desired address position on the optical disc is an operation corresponding to the Claim 6 operation recited in terms of the head not being in proximity with the wobbling spiral groove, which is an inherent result of such track seeking head movement. Also, the Claim 6 recital of “providing a wobble enable signal from the system controller to the PLL circuit at least when the system controller is controlling components of the recording/reproducing apparatus to provide the operations resulting in the loss of the extracted wobble signal” relates to

the above-noted provision of the wobble enable signal to the PLL circuit when there is no wobble signal extracted from the signal the head 11 obtains from the wobbling spiral groove as explained relative to the wobble signal shown in FIG 7 and its explanation at page 11, lines 1-7, for example.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1 and 6-10 have been finally rejected as being anticipated by Inokuchi et al. (U.S. Patent No. 6,172,952, Inokuchi) under 35 U.S.C. §102(e) .

VII. ARGUMENT

A. The Claim 1 system controller means is not taught by Inokuchi.

1. Means-plus-function limitations have not been properly considered under prevailing precedent.

The rejection of Claim 1 under 35 U.S.C. § 102(e) as being anticipated by Inokuchi is clearly in error as to misconstruing the Claim 1 “system controller means” as being taught relative to at least four different and separately functioning components (4, 8, 10, and 22) of Inokuchi. In this regard, Claim 1 clearly recites that it is the Claim 1 “system controller means” that will “control components of the recording/reproducing apparatus including servo circuit means” while also “controlling the servo circuit means for moving the head means to a desired address position on the optical disk” and also producing a wobble enable signal and supplying this wobble enable signal to a phase locked loop (PLL) circuit means to control this PLL circuit means to provide an unchanging synch signal not subject to particular wobble disturbance conditions.

In this last regard, the Claim 1 “system controller means” must produce and supply the “wobble enable signal when the system controller means controls switching of the recording/reproducing apparatus between at least one of recording and reproducing operations, when the system controller means controls the servo circuit means to move the head means to a desired address position on the optical disc, and when the wobble-signal processing means otherwise does not provide a wobble signal extracted from the signal the head means obtains from the wobbling spiral groove.”

The final Action of June 7, 2004, fails to present any reasonable explanation of why the four different individual components (4, 8, 10, and 22 noted in items 3(c), 3(d), 3(g), and 3(h) at pages 3-5 of this final Action) disclosed by Inokuchi can be reasonably interpreted to each be separately identical to the “system controller 13” that is disclosed in the specification to perform the above-noted expressly stated functions of Claim 1, or an equivalent (under the sixth paragraph of 35 U.S.C. §112) to this “system controller 13.”

To the extent that the final Action might also be suggesting reliance on a combination of these above-noted separate elements 4, 8, 10, and 22 as being interpreted to be the claimed system controller means, this suggested combination finds no support in the disclosure of Inokuchi, as fully treated below. Moreover, even if elements 4, 8, 10, and 22 of Inokuchi were to be combined for some reason not established by the record here, the resulting combination would not be the “system controller 13” that must perform the above-noted expressly stated functions of Claim 1 while also controlling the other elements shown by FIG. 1, or an equivalent (under the sixth paragraph of 35 U.S.C. §112) to this “system controller 13.”

Accordingly, no matter which of the above noted possibilities (considered as separate entities or in combination) is the unstated reason for the PTO above-noted reliance on elements 4, 8, 10, and 22, the rejection is still improper because it is well established that the broadest reasonable interpretation that an examiner may give means-plus-function language in a pending application is the interpretation statutorily mandated by the sixth paragraph of 35 U.S.C. §112. *See in re Donaldson Co.*, 16 F.3d 1189, 1194-95, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (in banc).

Accordingly, no *prima facie* case of anticipation can be said to have been established based upon a theory of the above-noted Inokuchi separate components being individually or collectively interpreted to be the same as the disclosed “system controller 13,” or being interpreted to be an equivalent (under the sixth paragraph of 35 U.S.C. §112) thereof. Therefore, it is respectfully submitted that the rejection of Claim 1 cannot be sustained on either of these possible interpretations based upon elements 4, 8, 10, and 22 of Inokuchi.

2. If the separate elements 4, 8, 10, and 22 are to be interpreted to be combined together, a showing of how Inokuchi teaches this combination must be presented.

To the extent that the final Action is relying on the separate circuit components 4, 8, 10, and 22 of Inokuchi being combined together to some how function as the claimed system controller means or system controller, this rationale is inadequate to support the 102 anticipation rejection of any of the rejected claims because there is no teaching or suggestion by Inokuchi that circuits 4, 8, 10, and 22 should be so combined. See *Lindemann Maschinen Fabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 222 USPQ 481, 485 (Fed. Cir. 1984); *Ex*

parte Gould, 6 USPQ2d 1680, 1682 (Bd. Pat. App. & Int. 1987); and *Ex parte Osmond*, 191 USPQ 334, 336 (Bd. Pat. App. & Int. 1973).

Moreover, not only is there no teaching or suggestion of the combination of 4, 8, 10, and 22 to be found in Inokuchi, the final Action lacks any reasonable explanation of how the artisan would go about such a combination while still maintaining the signal generation functions of components 4 and 8, for example. *See In re Lee*, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1432-33 (Fed. Cir. 2002) as follows:

... the agency tribunal must present a full and reasoned explanation of its decision. The agency tribunal must set forth its findings and the grounds thereof, as supported by the agency record, and explain its application of the law to the found facts.

With further regard to the lack of any suggestion for a combination of circuits 4, 8, 10, and 22 of Inokuchi, it is well settled that even an obviousness rejection “cannot be predicated on the mere identification . . . of individual components of claimed limitations” in a reference, instead, to support the assertion that such individually disclosed components would have been combined by the artisan, “particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.” *See In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

Accordingly, it is again believed to be clear that no *prima facie* case of anticipation can be said to have been established as to any of the rejected claims based upon a theory of the relied upon separate components being collected together into the

claimed system controller or system controller means. Therefore, it is respectfully submitted that reversal of the anticipation rejection of Claim 1 and 6-10 is in order.

B. The Claim 9 system controller is also not taught by Inokuchi.

Even though Claim 9 recites a “system controller” instead of the Claim 1 “system controller means,” there still must be a teaching of this Claim 9 “system controller” arrangement by Inokuchi. As no such arrangement teaching is present in Inokuchi as to the individual elements 4, 8, 10, and 22 being brought together, the above-noted case law again dictates a finding that no *prima facie* case of anticipation can be said to reasonably exist based upon a mere assumption that the separate circuits might be combined.

It is further respectfully submitted that the anticipation rejection of Claim 9 cannot be sustained based upon any rationale suggesting that different components 4, 8, 19, and 22 can be interpreted to correspond to the same Claim 9 recited “system controller” by simply correlating these different components to the different functions that Claim 9 requires the recited “system controller” to alone perform.

C. Inokuchi does not teach circuits 4, 8, 10, and 22 as performing the functions of the Claim 1 system controller means or the Claim 9 system controller.

1. The reproduced signal/servo signal detection circuit 4 and the recording signal generating circuit 8 of Inokuchi are not taught to control a “servo circuit means” or a “servo circuit.”

Item 3(c) of page 3 of the final Action suggests that the PTO interprets the reproduced signal/servo signal detection circuit 4 and the recording signal generating circuit 8 of Inokuchi as performing at least some of the functions of the Claim 1 “system controller means,” in terms of “controlling components of the

recording/reproducing apparatus” that specifically includes the recited “servo circuit means.” Item 4 on page 5 of the final Action relies upon this same rationale as to the functions of the Claim 9 “system controller” that must exert “control” of “components of the recording/reproducing apparatus” that specifically include “a servo circuit.”

However, circuits 4 and 8 are disclosed by Inokuchi to generate signals, not as control circuits for controlling any components, much less as controlling the claimed “servo circuit means” or “servo circuit.” See, for example, col. 10, lines 13-20, of Inokuchi that describe the reproduced signal/servo signal detection circuit 4 as generating a reproduced signal and focus/tracking error signals that will be used by the focusing/tracking control section 10 (not by 4 itself) to control focusing and tracking. Further note that col. 10, lines 38-44, of Inokuchi describe the recording signal generating circuit 8 as generating and outputting a signal for optically modulating a laser via the laser drive circuit 7, not for controlling any servo circuit or servo circuit means.

Accordingly, it is clear that the PTO is improperly relying on an assumption in the form of a completely subjective conclusion that Inokuchi teaches some kind of control of components of the recording/reproducing apparatus including a “servo circuit” (Claim 9) or “servo circuit means” (Claim 1), not the actual functions of the reproduced signal/servo signal detection circuit 4 and the recording signal generating circuit 8 that are disclosed by Inokuchi. Such reliance on assumption and/or completely subjective conclusions is contrary to established case law requiring the PTO to present factual evidence, not assumptions or subjective conclusions. *See In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001) (“With respect to core factual findings in a determination of patentability, however, the [PTO] . . . must point to some concrete evidence in the record in support of these findings.”); *In*

re Lee, 277 F.3d at 1343-44, 61 USPQ2d at 1434 (This factual question . . . material to patentability [cannot] be resolved on subjective belief and unknown authority.”); and *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967) (“The Patent Office has the initial duty of supplying the factual basis for its rejection. It may not, because it may doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis.”).

Accordingly, it is respectfully submitted that the rejection of Claims 1 and 9 as being anticipated by Inokuchi should also be reversed because there is no reasonable teaching to be found in Inokuchi of circuits 4 or 8 controlling the claimed servo circuit or servo circuit means.

2. The focusing/tracking control section 10 of Inokuchi is not taught to control any “servo circuit means” or “servo circuit.”

Item 3(d) of the final Action appears to either change the interpretation of item 3(c)¹ to an interpretation that these claimed elements are being read on the focusing/tracking control section 10 of Inokuchi or to suggest that the elements 4, 8, and 10 can be considered to be in combination to be read as the Claim 1 “system controller means” and the Claim 9 “system controller,” even though no such combination teaching is present in Inokuchi as noted above. This attempted change in the interpretation of what in Inokuchi can be reasonably said to correspond to the Claim 1 “system controller means” and the Claim 9 “system controller” based on either of these improper rationales fails, however, because each of these improper rationales ignores the recitation of Claim 1 that “the system controller means

¹ Item 3(c) asserts that the Claim 1 “system controller means” (and, thus, the Claim 9 “system controller”) is being read on circuits 4 and 8.

controlling the servo circuit means” and the similar recitation of Claim 9 (“the system controller being further configured to control the servo circuit”).

In this last regard, if the Claim 1 “system controller means” and the Claim 9 “system controller” are interpreted to correspond to or to include the focusing/tracking control section 10 of Inokuchi, then there is nothing left in Inokuchi that can be reasonably be interpreted to be the Claim 1 “servo circuit means” or the Claim 9 “servo circuit.” In this respect, it is clear that col. 16, lines 34-36, of Inokuchi teach that the focusing/tracking control section 10 directly controls the movement of head 3 across the tracks, and not that 10 controls some other element or component that can reasonably be interpreted as corresponding to the claimed “servo circuit means” or “servo circuit.” To the extent that the PTO continues to insist that Inokuchi teaches focusing/tracking control section 10 as somehow controlling another element that can be reasonably interpreted to be the Claim 1 required “servo circuit means” or the Claim 9 required “servo circuit,” it is called upon to indicate where in Inokuchi there is such a teaching and to point out the reference number of the element being interpreted to be the Claim 1 “servo circuit means” and the Claim 9 “servo circuit.” *See In re Rijckaert*, 9 F.3d 1531, 1533, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (“When the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference.”).

Accordingly, it is respectfully submitted that the rejection of Claims 1 and 9 as being anticipated by Inokuchi should also be reversed because there is no teaching in Inokuchi that the focusing/tracking control section 10 of Inokuchi is to function to control anything reasonably readable as the Claim 1 “servo circuit means” or the Claim 9 “servo circuit.”

3. The reproduced signal/servo signal detection circuit 4 is improperly asserted to read as part of the “system controller means” (Claim 1) or “system controller (Claim 9) at the same time it is improperly asserted to corresponds to the Claim 1 “wobble signal processing means” and Claim 9 “wobble signal processing circuit.”

Compounding the errors of item 3(c) of the final Action is the further attempt by item 3(e) to change the interpretation of item 3(c) as to the function taught by Inokuchi to be performed by the reproduced signal/servo signal detection circuit 4. In this respect, item 3(e) asserts that the reproduced signal/servo signal detection circuit 4 can be said to correspond to the Claim 1 “wobble signal processing means” and Claim 9 “wobble signal processing circuit” while also still being read as being or being included as part of the Claim 1 “system controller means” or Claim 9 “system controller.”

Besides this clear contraction as to what in Claims 1 and 9 the reproduced signal/servo signal detection circuit 4 can be said to teach, the item 3(e) attempt to read the reproduced signal/servo signal detection circuit 4 as the Claim 1 “wobble signal processing means” and Claim 9 “wobble signal processing circuit” is improper because the reproduced signal/servo signal detection circuit 4 is only disclosed to provide outputs to amplifier/filter14 and the focusing/tracking control section 10. Thus, the reproduced signal/servo signal detection circuit 4 is not disclosed or suggested as functioning as set forth in Claims 1 in terms of “providing the wobble signal to a PLL circuit means for producing a sync signal from the wobble signal” or as set forth in Claim 9 in terms of providing “the wobble signal to a PLL circuit configured to produce a sync signal from the wobble signal.”

Accordingly, it is respectfully submitted that the rejection of Claims 1 and 9 as being anticipated by Inokuchi should be reversed because it misconstrues the

functions actually taught to be performed by the reproduced signal/servo signal detection circuit 4.

4. The abnormal jump detection circuit 22 has not been properly interpreted based upon the actual teachings of Inokuchi.

Adding to the confused interpretation of what in Inokuchi corresponds to the Claim 1 “system controller means” and the Claim 9 “system controller” is the attempt in items 3(g) and 3(h) of the final Action to once again either change the disclosed component of Inokuchi being so interpreted or to add another component to be combined with 4, 8, and 10 without this being taught by Inokuchi. In this regard, items 3(g) and 3(h) of the final Action appear to interpret the abnormal jump detection circuit 22 as either being the Claim 1 “system controller means” and the Claim 9 “system controller” in terms of performing just the function noted in this item or as being combined with the other elements 4, 8, and 10 to perform as the Claim 1 “system controller means” and the Claim 9 “system controller” in terms of performing the function noted in this item as well as those discussed as being performed in items 3(c) and 3(d). Both of these rationales are clearly without merit for the reasons fully discussed above.

Besides the above-noted improper interpretations of the Claim 1 “system controller means” and the Claim 9 “system controller,” item 3(g) of the final Action further improperly states that the Inokuchi abnormal jump detection circuit 22 is what “produces a wobble enable signal” that is applied to the PLL circuit means of Claim 1 or the PLL circuit of Claim 9 at least “when the system controller means controls switching of the recording/reproducing apparatus between at least one of the recording and reproducing operations” as stated in Claim 1 or “when the system

controller controls switching of the recording/reproducing apparatus between at least one of a recording and a reproducing operation" as stated in Claim 9.

Contrary to these claim requirements, the Inokuchi abnormal jump detection circuit 22 is illustrated in Fig. 1 as having just one output (labeled as an "abnormal jump detection signal") that is not shown connected to anything. This "abnormal jump detection signal" is further disclosed (at col. 16, lines 4-9) to be possibly "provided to the demodulator 6 and the reproducing digitization circuit 5, or to the modulator 9, the recording signal generating circuit 8 and the laser drive circuit 7" to thereby stop these sections to "immediately stop the reproduction/recording of data." Thus, there is no reasonable teaching or suggestion here or elsewhere in Inokuchi to apply this output "abnormal jump detection signal" to any of the parts of the PLL, including charge pump 18.

In this last regard, while col. 16, lines 32-44, of Inokuchi discuss various inputs to the PLL charge pump 18², there is no disclosure or suggestion of any of these inputs to the PLL charge pump 18, or any other inputs to any part of the PLL components 17-21, as being from the abnormal jump detection circuit 22.

Further in this last regard, page 5, item 3(i) of the final Action appears to erroneously suggest that Fig. 1 of Inokuchi shows an output from the abnormal jump detection circuit 22 being received by the charge pump 18 of the Inokuchi PLL circuit (composed of circuits 17-21). What Fig. 1 of Inokuchi actually shows, however, is an undefined and apparently erroneous line between the abnormal jump detection circuit 22 and the charge pump 18 that has arrows indicating the supply of some unknown

² The inputs to 18 being from the focusing/tracking control section 10, while it causes movement of optical head 3 across tracks; from the gate signal generator 12, while optical head 3 is scanning the address region on the optical disk 2; and from the digitization circuit 15 indicating no wobble signal being digitized.

signal to both of these elements from some unknown source, not the supply of an output from 22 to an input of 18.

It appears to be likely that this line of Fig. 1 that appears between elements 18 and 22 with arrows showing inputs to both 18 and 22 is a drafting error and that this line should be shown as being connected to the line extending down from that gate signal generator 12 to match the description of an input from 12 to 18³ that has been omitted from Fig. 1. In any event, this portion of Fig. 1 is clearly ambiguous as being subject to inconsistent interpretations as to what purpose the unlabeled line between elements 22 and 18 could serve. It is well established that such ambiguous showings subject to different interpretations cannot be relied upon to establish anticipation. *See, e.g., In re Turlay*, 304 F.2d 893, 899, 134 USPQ 355, 360 (CCPA 1962).

Moreover, items 3(g) and 3(h) on pages 4-5 of the final Action include a further clear misstatement that is not consistent with the disclosure of Inokuchi as to the assertion that the “abnormal jump detector always produces a signal” and that there is an output when there is a change in mode (recording to or from reproducing). As explained at col. 15, line 45 through col. 16, line 3, of Inokuchi, the abnormal jump detection circuit 22 only produces an output signal indicating a track jump when the optical head jumps from a track of type “0” (a groove track, for example) to one of type “0+1” (a track of type opposite to a “0” type, i.e., a land track when type “0” is a groove type, see col. 15, lines 19-24). There is clearly nothing reasonably taught or suggested by Inokuchi that supports the misstatement that the “abnormal jump detector always produces a signal” of above-noted items 3(g) and 3(h), much less the further misstatements that the abnormal jump detector produces such a signal

³ See footnote 2.

“especially during the switching of recording/reproducing operations” as urged in item 3(g) and “during servo operations” as urged in item 3(h).

As noted above, there is only one disclosed output from 22 and this output (the “abnormal jump detection signal”) is taught to be used to possibly discontinue (stop) an ongoing recording or reproducing operation, not to switch between these operations. Also, even the track jump detection circuit 22 would clearly not be operated when intentionally jumping tracks because the first change between track type would indicate a false abnormal jump that would shut everything down.

Accordingly, it is respectfully submitted that the rejection of Claims 1 and 9 as being anticipated by Inokuchi should be reversed as relying upon improper interpretations of the functioning of the abnormal jump detection circuit 22.

C. Inokuchi does not teach or suggest the subject matter of method Claim 6.

1. The focusing/tracking control section 10 of Inokuchi cannot be equated to the system controller used in Claim 6.

The method of Claim 6 includes, *inter alia*, the step of:

using a system controller to control components of the recording/reproducing apparatus to provide operations resulting in the loss of the extracted wobble signal including the operation of switching between recording and reproducing functions and operations in which the head is not in proximity with the wobbling spiral groove;

Item 5(e) of the final Action first suggests that the above-noted step of “using a system controller” to perform the recited sub-step of “switching between recording and reproducing functions” can be reasonably interpreted to read on operations disclosed to be performed by the focusing/tracking control section 10 of Inokuchi.

While this focusing/tracking control section 10 is shown by Fig. 1, it is not described at col. 8, lines 18-21 as incorrectly asserted in the portion of item 5(e) bridging pages 6 and 7. Instead, col. 8, lines 18-21 appear to be broadly describing the

stopping of a recording or reproducing operation when an abnormal jump is detected where this is more completely described at col. 16, lines 4-9 as to abnormal jump detection circuit 22 operation, not the operation of 10 and not as to any mode switching.

Furthermore, the portion of item 5(e) at the top of page 7 is clearly mistaken in asserting that “an operation such as recording/reproducing discontinue is provided by an abnormal jump as a result in the loss of extracted wobble signal” because the determination of an abnormal jump requires comparing extracted wobble signals, see again col. 15, lines 44-65. Also, the implication that recording/reproducing discontinue (stopping) is equivalent to switching between these modes is further clearly wrong.

In this regard, the stopping of an operation because the track desired for ongoing recording or reproducing has been accidentally shifted and the claimed “operation of switching between recording and reproducing functions” (emphasis added) are not identical and the PTO cannot treat them as being identical without pointing to a teaching in Inokuchi establishing that when Inokuchi indicates that one of the recording or reproducing operations are stopped, Inokuchi is actually stating that there is a switching from one operation to the other. *See In re Kotzab*, 217 F.3d at 1371, 55 USPQ2d at 1317 and the court’s requirement that there must be relevant evidence as a reasonable mind might accept as adequate to support the conclusion that seemingly different language of “stopping a recording or reproducing function” and “switching from a recording function to a reproducing function or vice versa” means the same thing.

To the extent that the PTO is relying upon some unexplained expansion of a teaching or suggestion in Inokuchi, such reliance is clearly improper in an anticipation

rejection. Even if the present rejection was one based upon obviousness instead of anticipation, the PTO must still present some reasonable explanation of why the artisan would have been led to expand the Inokuchi teaching of simply stopping the recording/reproducing operation being performed when an accidental jump to an unintended adjacent track occurs to include turning on of the other function after detection of the accidental jump that causes the first function to be stopped.

Accordingly, it is respectfully submitted that the rejection of Claim 6 as being anticipated by Inokuchi should be reversed because of the above-noted mistaken assertions made as to the focusing/tracking control section 10 and/or the abnormal jump detection circuit 22 of Inokuchi being equated to the system controller use recited in Claim 6.

2. The abnormal jump detection circuit 22 has not been properly interpreted in items 5(f) and 5(g) based upon the actual teachings of Inokuchi.

Items 5(f) and 5(g) of the final Action are in error in interpreting the abnormal jump detection circuit 22 as providing the Claim 6 wobble enable signal from the recited system controller under the conditions specified by Claim 6 and suggesting that an output from 22 is taught by Inokuchi to be provided to cause PLL circuit 17-21 to hold its output unchanged. As noted in the above discussion of item 5(e) and that of items 3(f)-(h), the PTO clearly misinterprets the operation of the abnormal jump detection circuit 22 and how the output thereof is disclosed to be used by Inokuchi.

Accordingly, it is respectfully submitted that the rejection of Claim 6 as being anticipated by Inokuchi should be reversed as relying upon improper interpretations of the functioning of the abnormal jump detection circuit 22 and where and how Inokuchi teaches the output from 22 to be applied.

D. Claims 7 and 10 require an input gate for the PLL circuit means or PLL circuit to receive the wobble enable signal and Claim 8 requires this signal be provided to a gate input of the PLL circuit.

Claim 7 depends on Claim 1 and further requires that there be an input gate of the PLL circuit means to receive the wobble enable signal from the system controller means. Claim 10 depends on Claim 9 and has a similar limitation in requiring that there be an input gate of the PLL circuit to receive the wobble enable signal from the system controller. Claim 8 depends from Claim 6 and recites that “the wobble enable signal from the system controller” is provided to a respective input “of a gate input of the PLL circuit.” Note the showing of input gate 24 of Fig. 8, for example.

Items 3 (k) and 5(h) of the final Action specifically addresses Claim 7 (3(k)) and Claim 8 (5(h)) and inferentially address Claim 10 in terms of common subject matter as to the wobble enable signal being applied to an input gate of the PLL circuit (PLL circuit means in Claim 7) that is also receiving the wobble signal.

Items 3(k) and 5(h) once again erroneously assert that Inokuchi teaches that there is an output applied from the abnormal jump detection circuit 22 to the charge pump 18 of the Inokuchi PLL circuit. Items 3 (k) and 5(h) compound this initial error by then characterizing the “charge pump 18” of Inokuchi as “an input gate 18.” However, it is well established that the PTO must establish that it is Inokuchi that equates the terms “charge pump” and “input gate” as the PTO cannot make such an assumption without prior art evidence. *See In re Kotzab, id.* setting forth that the USPTO errs when it assumes an equivalence between clearly different terms without first establishing a prior art basis for that determination. Here, there is nothing cited to show that the artisan would consider that a “charge pump” is simply a well known alternative term meaning the same thing as an “input gate.” Moreover, it is clear that

the artisan would have no reasonable basis to believe that 22 supplies any signal to 18, as fully discussed above, much less a wobble enable signal as specified.

Item 3(k) is further deficient in failing to present any explanation as to how the charge pump 18 of Inokuchi can be reasonably said to also receive the wobble signal from the wobble-signal processing means of Claim 7 (or similar wobble-signal processing circuit of Claim 8). Instead of an explanation based upon evidence apparent from Inokuchi, Item 3(k) erroneously urges that Fig. 1 and col. 17, lines 51-57 (part of a claim) somehow teach an output from 4 being input to 18, the element erroneously urged to be reasonably interpreted to be an input gate of the PLL.

While Claim 8 recites similar subject matter in a slightly different way, there is no explanation in item 5(h) as to how the Claim 8 wobble enable signal from the system controller, being erroneously urged to read on element 22 of Inokuchi, and the wobble signal can be reasonably interpreted as being applied to respective inputs of the Inokuchi charge pump element 18 that is erroneously urged to be readable as an input gate.

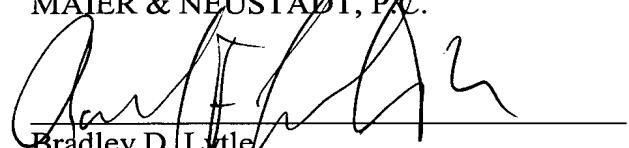
As the errors in the PTO rejection and rationale offered in items 3 (k) and 5(h) are also clear and prejudicial as to the rejection of Claims 7, 8, and 10, the reversal of this rejection is also respectfully submitted to be in order.

CONCLUSION

The rejection applied to Claims 1 and 6-10 should be reversed as being clearly improper under the controlling precedent cited above and for the above-noted reasons.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073
Raymond F. Cardillo, Jr.
Registration No. 40, 440

Customer Number

22850

BDL/RFC/jmp

Tel.: (703) 413-3000
Fax: (703) 413-2220

VII. CLAIMS APPENDIX

1. A recording/reproducing apparatus for recording and reproducing data on and from an optical disk that has an address data area having embossed pits and a recording/reproducing area having a wobbling spiral groove, said apparatus comprising:

head means for reading address data from the address data area and writing and reading a signal in and from the recording/reproducing area;

system controller means for controlling components of the recording/reproducing apparatus including servo circuit means, the system controller means controlling the servo circuit means for moving the head means to a desired address position on the optical disk; and

wobble-signal processing means for extracting a wobble signal from the signal the head means obtains from the wobbling spiral groove and for providing the wobble signal to a PLL circuit means for producing a sync signal from the wobble signal,

wherein the system controller means further produces a wobble enable signal when the system controller means controls switching of the recording/reproducing apparatus between at least one of recording and reproducing operations, when the system controller means controls the servo circuit means to move the head means to a desired address position on the optical disc, and when the wobble-signal processing means otherwise does not provide a wobble signal extracted from the signal the head means obtains from the wobbling spiral groove and provides the wobble enable signal to the PLL circuit means, said PLL circuit means further providing an unchanging sync signal in response to receiving the wobble enable signal.

6. A recording/reproducing method of recording and reproducing data on and from an optical disk that has an address data area having embossed pits and a recording/reproducing area having a wobbling spiral groove, said method comprising the steps of:

reading address data from the address data area and writing and reading a signal from the recording/reproducing area using a head;

extracting a wobble signal from a signal obtained from the wobbling spiral groove when the head and wobbling spiral groove are in proximity;

providing the wobble signal to a PLL circuit to produce a sync signal from the wobble signal;

using a system controller to control components of the recording/reproducing apparatus to provide operations resulting in the loss of the extracted wobble signal including the operation of switching between recording and reproducing functions and operations in which the head is not in proximity with the wobbling spiral groove ;

providing a wobble enable signal from the system controller to the PLL circuit at least when the system controller is controlling components of the recording/reproducing apparatus to provide the operations resulting in the loss of the extracted wobble signal the wobble enable signal from the system controller causing the PLL circuit to hold the sync signal unchanged as long as the wobble enable signal is provided by the system controller.

7. The recording/reproducing apparatus according to Claim 1, wherein the system controller means provides the wobble enable signal to an input gate of the PLL

circuit means also receiving the wobble signal from the wobble-signal processing means.

8. The recording/reproducing method according to Claim 6, wherein the wobble enable signal from the system controller and the wobble signal are provided to respective inputs of a gate input of the PLL circuit.

9. A recording/reproducing apparatus configured to record and reproduce data on and from an optical disk that has an address data area having embossed pits and a recording/reproducing area having a wobbling spiral groove, said apparatus comprising:

a head configured to read address data from the address data area and to write and read a signal in and from the recording/reproducing area;

a system controller configured to control components of the recording/reproducing apparatus including a servo circuit, the system controller being further configured to control the servo circuit to move the head to a desired address position on the optical disk; and

a wobble-signal processing circuit configured to extract a wobble signal from the signal the head obtains from the wobbling spiral groove and to provide the wobble signal to a PLL circuit configured to produce a sync signal from the wobble signal,

wherein the system controller is further configured to produce a wobble enable signal when the system controller controls switching of the recording/reproducing apparatus between at least one of a recording and a reproducing operation, when the system controller controls the servo circuit to move the head to a desired address position on the optical disc, and when the wobble-signal

processing circuit otherwise does not provide a wobble signal extracted from the signal the head obtains from the wobbling spiral groove and provide the wobble enable signal to the PLL circuit, said PLL circuit being further configured to provide an unchanging sync signal in response to receiving the pulse wobble enable signal from the system controller.

10. The recording/reproducing apparatus according to Claim 9, wherein the system controller is connected to provide the wobble enable signal to an input gate of the PLL circuit also receiving the wobble signal from the wobble-signal processing circuit.

IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None